



UNIVERSITÀ
DEGLI STUDI
FIRENZE

FLORE

Repository istituzionale dell'Università degli Studi di Firenze

Floristic and phytosociological approach at the alliance level for the evaluation of conservation priorities in a Mediterranean wetland: a

Questa è la Versione finale referata (Post print/Accepted manuscript) della seguente pubblicazione:

Original Citation:

Floristic and phytosociological approach at the alliance level for the evaluation of conservation priorities in a Mediterranean wetland: a proposal of a synthetic index / Angiolini C.; Viciani D.; Bonari G.; Fazzi V.; Lastrucci L. - ELETTRONICO. - (2014), pp. 16-16. (Intervento presentato al convegno Scienza della Vegetazione e monitoraggio della Biodiversità, 48° Congresso della Società Italiana di Scienza della Vegetazione tenutosi a Roma nel 17-19 settembre 2014).

Availability:

This version is available at: 2158/901165 since:

Publisher:

Società Italiana di Scienza della Vegetazione

Terms of use:

Open Access

La pubblicazione è resa disponibile sotto le norme e i termini della licenza di deposito, secondo quanto stabilito dalla Policy per l'accesso aperto dell'Università degli Studi di Firenze (<https://www.sba.unifi.it/upload/policy-oa-2016-1.pdf>)

Publisher copyright claim:

(Article begins on next page)



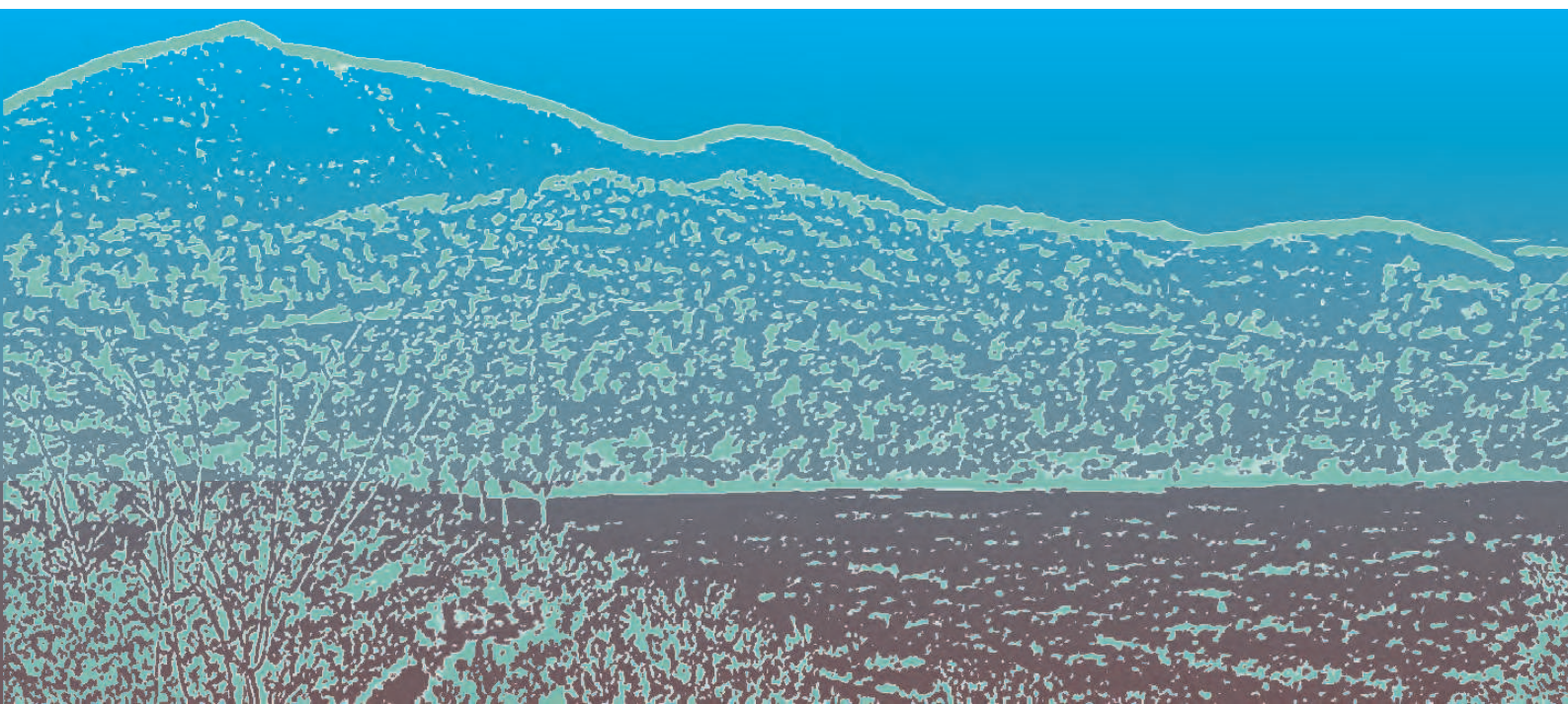
ATTI DEL 48° CONGRESSO

*Scienza della Vegetazione
e monitoraggio della
Biodiversità*

50° 
Anniversario

Sapienza Università di Roma

17|18|19 settembre 2014



ISBN 978-88-908391-2-2

Comitato Scientifico

Carlo Blasi, Roberto Venanzoni, Fabio Attorre, Gianluigi Bacchetta,
Francesco Bracco, Daniela Gigante, Riccardo Guarino, Sandro
Strumia

Comitato Organizzativo

Piera Di Marzio, Fabio Attorre, Paola Fortini, Elisabetta
Brugiapaglia, Bruno Paura, Sonia Ravera, Angela Stanisci

Segreteria

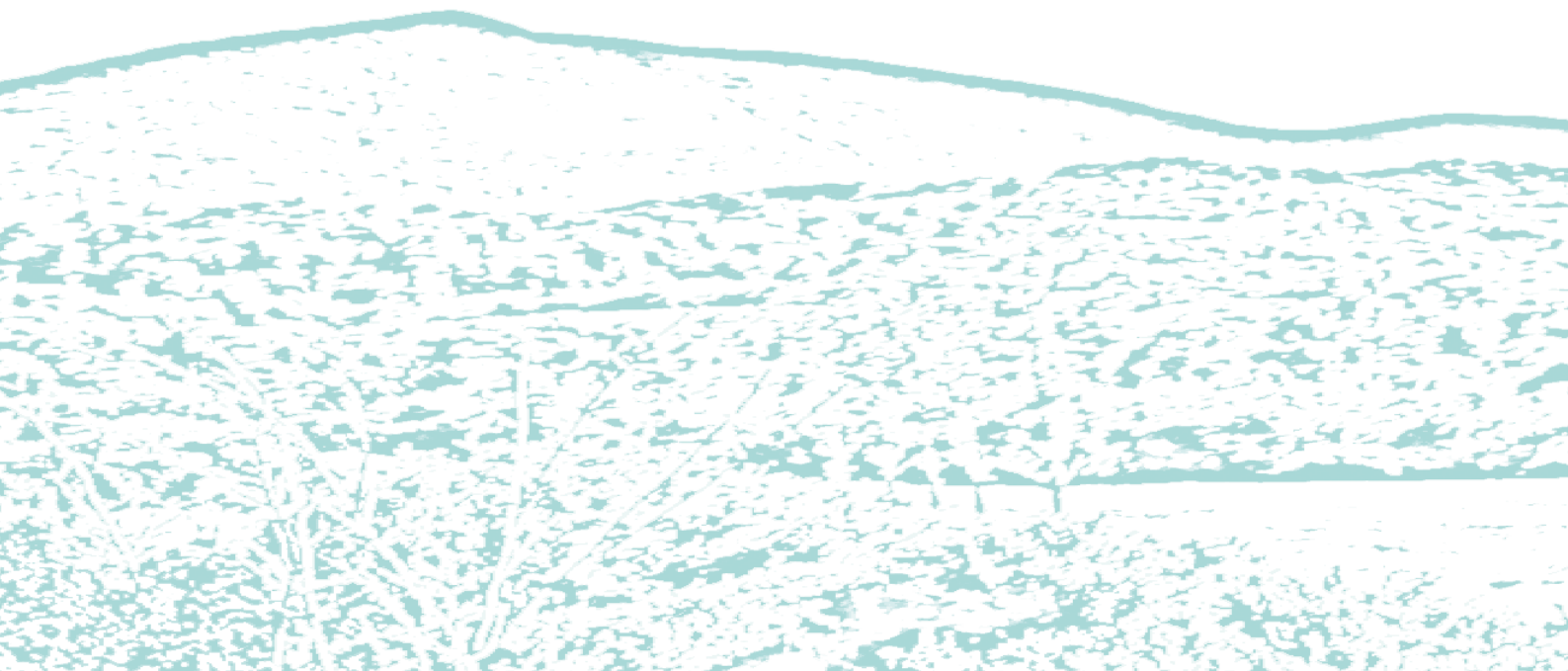
Piera Di Marzio
Tel: 0874 404149
Cell. 320 4794030
piera.dimarzio@unimol.it



UNIVERSITÀ
DEGLI STUDI
DEL MOLISE



SAPIENZA
UNIVERSITÀ DI ROMA



Relazioni e comunicazioni

Floristic and phytosociological approach at the alliance level for the evaluation of conservation priorities in a Mediterranean wetland: a proposal of a synthetic index

Angiolini C.¹, Viciani D.², Bonari G.¹, Fazzi V.¹, Lastrucci L.²

¹ Dept. of Life Sciences, University of Siena, Via P.A. Mattioli 4, I-53100 Siena

² Dept. of Biology, University of Florence, Via La Pira 4, I-50121 Florence

Wetlands are known how important ecosystems for the conservation of the biodiversity, nevertheless have always been exposed to threats and negative pressures (Dudgeon *et al.*, 2006). Wetlands have suffered from a generalized impoverishment of flora and vegetation that underlined the need for protection measures, in particular in the Mediterranean area. Moreover, several wetland plant communities, rare in Mediterranean basin, are not included in the Habitat Directive (Benavént-Gonzales *et al.*, 2014), neither in other protection lists, probably due to their relative diffusion in other biogeographical areas (mostly in central and northern Europe).

This study has the main aim to assay the conservational importance of wetland plant communities in a Mediterranean area, using alliances as the basic unit. According to Biondi *et al.* (2012), alliance is a powerful indicator for the identification of habitats of conservation interest under the Habitat Directive. The system of lakes Chiusi and Montepulciano, which is one of the most important complex of inland waters of central Italy, is the study case to this purpose. We analyzed the data set of recent phytosociological study of Lastrucci *et al.* (submitted), using multivariate statistical methods and the new Habitat/Alliance Conservation Quality (HACQ) index based on HCP of Bragazza (2009) and modified for our evaluations.

Our investigations highlighted higher values of HACQ of some hydrophytic and helophytic alliances indicating that these are the most important vegetation target for conservation in Mediterranean wetlands. Among these are: i) alliances belonging to habitat of the 92/43 EEC, very rarefied in the Italian territory as 3150 and 3130, characterized by a high presence of both species on the red list of Italian and regional interest; ii) alliances not belonging to any protection list, like *Magnocaricion elatae*, *Carici-Rumicion hydrolapathi* and *Eleocharito palustris-Sagittarion sagittifoliae*, significantly differentiated by a high percentage of species present in the lists of attention to the regional context. Our results reflect the importance of regional singularities when setting conservation quality in Mediterranean wetlands besides the necessity to consider regional singularities for accurate lists of habitats attention at least at the national level. The proposed index, allowing to identify habitat very important from a floristic point of view also at regional/local level, furthermore can be an help to bridge some gaps of the Habitats Directive.

Benavent-González A., Lumbreras A., Molina J. A., 2014. *Plant communities as a tool for setting priorities in biodiversity conservation: a novel approach to Iberian aquatic vegetation*. Biodiversity and Conservation, 23: 1-20.

Biondi E., Burrascano S., Casavecchia S., Copiz R., Del Vico E., Galdenzi D., Gigante D., Lasen C., Spampinato G., Venanzoni R., Zivkovic L., Blasi C., 2012. *Diagnosis and syntaxonomic interpretation of Annex I Habitats (Dir. 92/43/EEC) in Italy at the alliance level*. Plant Sociology, 49(1): 5-37.

Bragazza L., 2009. *Conservation priority of Italian Alpine habitats: a floristic approach based on potential distribution of vascular plant species*. Biodiversity and Conservation, 18: 2823-2835.

Dudgeon D., Arthington A.H., Gessner M.O., Kawabata Z., Knowler D., Leveque C., Naiman R.J., Prieur-Richard A.H., Soto D., Stiassny M.L.J., 2006. *Freshwater biodiversity: importance, threats, status, and conservation challenges*. Biol Rev, 81:163-182.

Lastrucci L., Bonari G., Angiolini C., Landi M., Casini F., Giallonardo T., Landucci F., Gigante D., Venanzoni R., Viciani D., (submitted). *Vegetation of Lakes Chiusi and Montepulciano (Tuscany, Central Italy): updated knowledge and new discoveries*. Plant Sociology.